

REMARKS

This Amendment is being filed in response to the Final Office Action mailed January 18, 2007, which has been reviewed and carefully considered. Reconsideration and allowance of the present application in view of the amendments made above and the remarks to follow are respectfully requested.

By means of the present Office Action, the specification has been amended to correct certain informalities noted upon review.

In the Final Office Action, claims 1, 4-5, 8-16 and 19-20 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Patent Abstracts of Japan, Publication No. JP 54-124583 (Noboru) in view of Patent Abstracts of Japan, Publication No. JP 01-178584 (Hiroyuki). Further, claims 1-5 are rejected under 35 U.S.C. §102(b) as allegedly anticipated by Patent Abstracts of Japan, Publication No. JP 60-003849 (Takatsu). Claims 6-7 and 17-18 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Noboru in view of Hiroyuki and U.S. Patent No. 5,512,798 (Honda). It is respectfully submitted that claims 1 and 4-20 are patentable over Noboru, Hiroyuki, Takatsu and Honda for at least the following

reasons.

Noboru is directed to raising the binding strength of a coated film of a fluorescent substance, by dispersing a slurry-like binder in a solution of the fluorescent substance, and then coating the solution on the inside surface of a fluorescent tube. The slurry-like binder contains aluminium phosphate.

Hiroyuki teaches forming a uniform and dense phosphor film on a color cathode ray tube, by adhering a silicate or phosphate and a bivalent or tetravalent tin compound on the surfaces of phosphor particles.

Takatsu teaches a metal vapor discharge lamp having a translucent film 3 to prevent the reaction between metal halogenide and a quartz tube wall on the inner surface of a luminous tube 1 made of quartz, except one portion. The translucent film 3 is mainly composed of aluminum phosphate, titanium oxide, aluminum oxide.

Honda is directed to a lamp having a top coating of insulating film 5 which is a laminate made of aluminum oxide powder, as recited on column 13, lines 39-42.

It is respectfully submitted that Noboru, Hiroyuki, Takatsu,

Honda, and combination thereof, do not teach or suggest the present invention as recited in independent claim 1, and similarly recited in independent claim 19 as well as recited in dependent claims 13 and 16, amongst other patentable elements, requires (illustrative emphasis provided) :

wherein the inorganic material comprises aluminium phosphate and silicon oxide.

Noboru, Hiroyuki, Takatsu, Honda, alone or in combination, do not teach or suggest an inorganic material comprising silicon oxide, as recited in claims 1, 13, 16, and 19. Further, Noboru, Hiroyuki, Takatsu, Honda, and combination thereof, do not teach or suggest the present invention as recited in independent claim 11, and similarly recited in independent claim 14, amongst other patentable elements, requires (illustrative emphasis provided) :

A luminescent screen comprising:
a first layer comprising a luminescent material having luminescent particles; and
a second layer comprising an inorganic material having inorganic particles including aluminium phosphate;
... the second layer directly covering the first layer.

Two layers, namely a luminescent material layer and an inorganic material layer, as recited in independent claims 11 and

14, are nowhere taught or suggested in Noboru, Hiroyuki, Takatsu, Honda, and combination thereof. Rather, Noboru and Hiroyuki teach a slurry or solution of mixed luminescent and inorganic material which is applied as a single layer. Takatsu merely teaches a single layer of inorganic material formed over a quartz tube 1.

Further, Honda merely teaches a phosphor film 6 and an insulator film 5 containing aluminum oxide powder, where the two films 5, 6 are separated by a conductive film 4. Thus, the insulator film 5 containing aluminum oxide powder is not formed directly over the phosphor film 6. It should be noted that the phosphor film 6 of Honda is exposed to the gases, such as mercury, present inside the lamp. That is, the phosphor film 6 of Honda is not formed on the lamp wall and subsequently covered with a layer containing inorganic particles.

In stark contrast, the present invention as recited in independent claim 14, amongst other patentable elements, requires (illustrative emphasis provided):

a luminescent screen formed on a wall of the discharge vessel;
the luminescent screen comprising:
a first layer comprising luminescent material having luminescent particles formed on

the wall of the discharge vessel; and
a second layer comprising inorganic material
having inorganic particles including aluminium
phosphate formed on the first layer;
wherein the second layer directly covers the
first layer.

Instead of a layer of luminescent material formed on the lamp wall, and then covering it with a second layer, as recited in independent claim 14, Honda teaches forming an insulator film 5 on the bulb wall, followed by a conductive film 4, and eventually forming a phosphor film 6 over the conductive film 4, thus leaving the phosphor film 6 exposed to gases included in the lamp. Thus, Honda teaches away from having a luminescent material on the lamp wall, and then covering it with a second layer, as recited in independent claim 14.

Based on the foregoing, it is respectfully submitted that independent claims 1, 11, 14 and 19 are allowable, and allowance thereof is respectfully requested. In addition, it is respectfully submitted that claims 4-10, 12-13, 15-18 and 20 should also be allowed at least based on their dependence from independent claims 1, 11, 14 and 19.

Claims 6-7 and 17-18 also include patentable subject matter,

since Noboru, Takatsu, Honda, and combinations thereof, do note teach or suggest a top layer formed over the luminescent screen, as recited in claim 6 and 17, or that the top layer comprises a compound chosen from the group formed by yttrium oxide, yttrium-strontium-borate and aluminium oxide, as recited in claim 7 and 18.

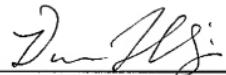
Rather, Honda merely teaches (e.g., as shown in FIG 1B) an insulating layer 5 formed over a conductive layer 4 to protect the conductive layer. A phosphor layer 6 is formed over the insulating layer 5, leaving the phosphor layer 6 uncovered and unprotected. This teaching of Honda is diametrically opposite forming a top layer over the luminescent screen, as recited in claim 6 and 17. Accordingly, Honda teaches away from the present invention as recited in claim 6 and 17. Further, forming the top layer from yttrium oxide or yttrium-strontium-borate, as recited in claim 7 and 18, is nowhere taught or suggested in Honda.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to

submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

By 
Dicran Halajian, Reg. 39,703
Attorney for Applicant(s)
February 8, 2007

THORNE & HALAJIAN, LLP
Applied Technology Center
111 West Main Street
Bay Shore, NY 11706
Tel: (631) 665-5139
Fax: (631) 665-5101